



Combined Sewer Overflow (CSO)

What are CSOs?

- Combined sewer overflows are remnants of the country's early infrastructure.
- In the past, communities built sewer systems to collect storm water runoff, domestic sewage and industrial wastewater in the same pipe.
- Most of the time, these "combined sewer systems" transport all their wastewater to the sewage treatment plant, where it is treated and then discharged to a water body.
- During periods of heavy rainfall or snowmelt, the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant.
- For this reason, combined sewer systems are designed to overflow occasionally and discharge excess wastewater directly to nearby streams, rivers, lakes or estuaries.
- Combined sewer overflows contain not only storm water but also untreated human and industrial waste, toxic materials and debris.

Where are CSOs a problem?

- Approximately 772 communities in the country, most in the Great Lakes and Northeast regions, have combined sewer systems.
- CSOs are a major water pollution concern for 105 Indiana cities.
- Most communities with CSO problems have fewer than 10,000 people.

Why are CSOs a problem?

- The untreated wastes that get into streams, rivers, lakes and estuaries contain human bacteria, human pathogens, other animal bacteria, chemicals, oils and other wastes.
- Hoosiers are exposed to these risks through swimming, water skiing, wading, splashing and playing, fishing and boating.
- CSOs are often the sources responsible for beach closings, shellfishing restrictions and other water body impairments.

What is being done about CSOs?

- The U.S. Environmental Protection Agency established a national CSO strategy in 1989.
 - The U.S. EPA reaffirmed CSOs as point source discharges subject to National Pollution Discharge Elimination System (NPDES) and Clean Water Act (CWA) requirements.
 - CSOs are subject to six technology-based requirements of the CWA.
 - U.S. EPA required the development and implementation of operational plans.
- Three minimum controls were added in a 1994 U.S. EPA National CSO policy. That policy also required the development and implementation of a Long Term Control Plan (LTCP).
- The Indiana Department of Environmental Management (IDEM) developed a state CSO strategy in 1996. It incorporates the requirements of the National CSO Policy of 1994 and requires the following:
 - Implementation of a CSO Operational Plan which documents the nine Minimum Controls (the six from the 1989 CSO strategy and three from the 1994 policy)
 - Stream Reach Characterization
 - Development and implementation of a Long Term Control Plan
- IDEM is actively reviewing LTCPs this year and the next two years for the 105 CSO communities in Indiana (listed below).

Where can I get more information about CSOs?

More information about CSOs is available through IDEM's Office of Water Quality at (800) 451-6027 and through IDEM's Web page at: <http://www.in.gov/idem/water/compbr/wetwthr/cso/index.html>.

Indiana Communities with Combined Sewer Overflow problems

Akron	Albion	Alexandria
Anderson	Angola	Attica
Auburn	Aurora	Avilla
Berne	Bluffton	Boonville
Brazil	Bremen	Brownsburg
Butler	Centerville	Chesterfield
Chesterton	Clinton	Columbia City
Columbus	Connersville	Crawfordsville
Crothersville	Crown Point	Decatur
East Chicago	Eaton	Eklhart
Elwood	Evansville	Fairmount
Fortville	Ft. Wayne	Frankfort
Gary	Goshen	Greenfield
Greensburg	Hammond	Hartford City
Huntington	Indianapolis	Jeffersonville
Kendallville	Kokomo	Lafayette
LaPorte	Ligonier	Logansport
Lowell	Madison	Marion
Markle	Michigan City	Middletown
Milford	Mishawaka	Monticello
Montpelier	Mount Vernon	Muncie
Nappanee	New Castle	New Haven
Noblesville	North Judson	North Manchester
North Vernon	Ossian	Oxford
Paoli	Peru	Plainfield
Plymouth	Portland	Redkey
Remington	Rensselaer	Richmond
Ridgeville	Rockport	Rossville
Royal Center	Rushville	Seymour
South Bend	South Whitley	Speedway
Sullivan	Summitville	Tell City
Terre Haute	Tipton	Valparaiso
Veedersburg	Wabash	Wakarusa
Warren	Warsaw	Washington
Waterloo	West Lafayette	Winamac